



US 20210097731A1

(19) **United States**(12) **Patent Application Publication**
Jotwani(10) **Pub. No.: US 2021/0097731 A1**(43) **Pub. Date: Apr. 1, 2021**(54) **PRESENTING ENVIRONMENT BASED ON
PHYSICAL DIMENSION**(71) Applicant: **Apple Inc.**, Cupertino, CA (US)(72) Inventor: **Payal Jotwani**, Santa Clara, CA (US)(21) Appl. No.: **16/987,805**(22) Filed: **Aug. 7, 2020****Related U.S. Application Data**

(60) Provisional application No. 62/906,659, filed on Sep. 26, 2019.

Publication Classification(51) **Int. Cl.**
G06T 11/00 (2006.01)
G06K 9/00 (2006.01)
G06T 7/60 (2006.01)
G06F 16/53 (2006.01)
G06F 16/58 (2006.01)(52) **U.S. Cl.**CPC **G06T 11/00** (2013.01); **G06K 9/00664**
(2013.01); **G06F 16/5866** (2019.01); **G06F**
16/53 (2019.01); **G06T 7/60** (2013.01)

(57)

ABSTRACT

Various implementations disclosed herein include devices, systems, and methods for generating a dimensionally accurate computer-generated reality (CGR) environment with a scaled CGR object. In some implementations, a method includes obtaining environmental data corresponding to a physical environment. A known physical article located within the physical environment is identified based on the environmental data. The known physical article is associated with a known dimension. A physical dimension of the physical environment is determined based on the known dimension of the known physical article. A CGR environment is generated that represents the physical environment. A virtual dimension of the CGR environment is a function of the physical dimension of the physical environment.

